

Supplementary Material

Development of a Nanoparticle System for Controlled Release in Bioprinted Respiratory Scaffolds

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Table S1. Materials used in the nanoparticles study.

Section	Notes	Catalogue Number	Lot #	Supplier
Cell Culture				
Primary Human Bronchial Epithelial Cells	cryopreserved	C12640	468Z003	Promocell
Primary Human Lung Fibroblasts	cryopreserved	C12360	446Z031	Promocell
Airway Epithelial Cell Growth Medium		C21060		Promocell
Growth Medium Supplement Mix		C39265		Promocell
Human Fibroblast Growth Medium-2		C23020		Promocell
Growth Medium 2 Supplemental Mix		C39325		Promocell
Anti-Anti		15240-062		Gibco
Nanoparticle Preparation				
Sodium Alginate	low viscosity	A1112		Sigma-Aldrich
Hepatocyte Growth Factor		ab259401	GR3453764-1	abcam
Paraffin Oil		18512		Sigma-Aldrich
Span 80	viscosity 1000-2000 mPa.s	85548		Sigma-Aldrich
CaCl ₂		223506		Sigma-Aldrich
Isopropanol		I9030	29996TK	Sigma-Aldrich
Chitosan		448877		Sigma-Aldrich
NaOH		1003614357		Sigma-Aldrich
Bioink Preparation				
Sodium Alginate	medium viscosity	180947		Sigma-Aldrich
Human Fibroblast Growth Medium-2		C23020		Promocell
Collagen	type 1 bovine methacrylated	9007-34-5		PhotoCol
Acetic Acid		351271	522112	Fisher
NaOH		1003614357		Sigma-Aldrich
Bioprinting				
Polyethyleneimine		M26B040	J61270	Alfa Aesar
Release Studies				
Human HGF ELISA Kit		ab275901		abcam
Cell Viability and Proliferation				
Phosphate Buffered Saline	10x concentrate	P5493	SLBX1610	Sigma
Ethylenediaminetetraacetic Acid Tetrasodium Salt Dihydrate		E6511		Sigma
WST-1		SKU5015944001		Sigma-Aldrich
Immunostaining				
Paraformaldehyde		CAS:50-00-0		Alfa Aesar
Sucrose	>99.5%	S0389	SLCJ6927	Sigma
FSC 22 Clear Frozen Section Compound		3801480		Leica
Isopentane	>99% purity	78-78-4		ThermoScientific

Mouse Monoclonal Anit-Vimentin		ab8069	abcam
Rabbit Monoclonal Anit-Pan-Cy-tokeratin		ab234297	abcam
Alexa Fluor 595	IgG H+L, donkey- anti mouse	A21207	Life Technologies
Alexa Fluor 488	IgG H+L, donkey- anti rabbit	A21202	Life Technologies
DAPI		62248	ThermoScientific
CitiFluor Mountant Solution		17970-25	Electron Microscopy Sci-ences